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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,987	03/07/2001	Lawrence A. Kennedy	27611/34370B	6848

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EXAMINER

RIDLEY, BASIA ANNA

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 09/800,987	Applicant(s) KENNEDY ET AL.	
	Examiner Basia Ridley	Art Unit 1764	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 23 June 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: _____.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheets (pages 2-3).
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s): _____
 13. ☐ Other: _____


 Basia Ridley
 Primary Examiner
 Art Unit: 1764

Continuation of 11. does NOT place the application in condition for allowance because: the arguments presented are not persuasive.

1. Regarding rejection of claims under 35 U.S.C. §112, first paragraph, the examiner regrets typographical error wherein only claims 1-16 were listed as being rejected. Clearly, as claims 17 and 18 depend (directly or indirectly) from claim 1, they include all of the limitations of said claim 1 and they are also rejected under 35 U.S.C. §112, first paragraph.
2. Applicant's arguments filed 23 June 2005 have been fully considered but they are not persuasive.
3. Regarding rejection of claims under 35 U.S.C. §112, first paragraph, the applicant argues that the specification sufficiently describes the claimed invention, specifically the step of "heating the reactant mixture in the heated reaction zone from a temperature less than the superadiabatic combustion temperature to a temperature sufficient to result in a superadiabatic combustion" as recited in amended claim 1, and again cites page 8, lines 21-25, which discloses "(...) flowing the reactant mixture through a heated zone (e.g. porous fixed-bed) of a reactor at a speed (u(t)). The porous, fixed-bed (or solid phase) serves as an intermediate for heat accumulation and regeneration. The reactor operates at a temperature sufficient to result in a SAC of the reactant mixture." The examiner would like to reiterate her position taken in Office action mailed on 9 March 2005 - the cited portion of the specification does not disclose that the reactants change their temperature from a starting temperature to a final temperature in the reaction zone.

Regarding applicant's arguments that the invention is not limited to the portions of the specification cited in the Office action the examiner would like to point out that the applicant is required to specifically point out the support for any amendments made to the disclosure, see MPEP § 714.02, § 2163(II)(A) and § 2163.06. Based on applicant's statement in Response filed on 12 August 2004, which indicated that newly added claim language is supported by specification, page 8, lines 21-25, the examiner has found that the disclosure does not reasonably convey that the inventor had possession of the subject matter of the amendment at the time of the filing of the application, and the examiner has presented reasoning to explain why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims. (see Office action mailed on 9 March 2005, paragraph 4).

The applicant argues that the specification provides an ample support for reactors containing apparatus for heating portions of the fixed bed reaction zone to a temperature sufficient to sustain superadiabatic combustion of the reactant mixture. This is not germane to the rejection on record, as claim 1 is rejected under 35 U.S.C. §112, first paragraph as reciting "heating the reactant mixture in the heated reaction zone (...)" and not heating of the reaction zone itself.

The applicant argues that passages cited in the prior Office action (see page 3 of said Office action) do, in fact, support that incoming reactants are heated using heat accumulated in the SAC zone of the reactor. This is not found persuasive. First passage cited on page 3 of prior Office action (page 14 lines 3-22) discloses that, while reactants are heated using heat generated in the SAC zone, said heat is accumulated (and consequently the reactants are heated) in either zone 32 or 34, outside of SAC zone. Page 16 lines 8-13 describes the embodiment wherein, again, the reactants are heated using heat generated in the SAC zone, but said heating does not occur in said SAC zone but rather in tube 104.

Applicant argues that specification discloses "that the incoming reactants are heated "to raise the temperature within the combustion zone [] to a temperature sufficient to initiate a reaction (i.e., self-ignition combustion temperature), the fuel-rich reactant mixture is flowed into the reactor where a combustion occurs, generating a wave of heat and combustion products". See the Specification at p. 13, lines 3-7; see also, the Specification at page 14, lines 9-12." This is not found persuasive. First of all the examiner would like to point out that above statement regarding reason why the reactants are heated can not be found on either p. 13, lines 3-7 nor page 14, lines 9-12. Next, said statement is not germane to the rejection on record, as claim 1 is rejected under 35 U.S.C. §112, first paragraph as reciting "heating the reactant mixture in the heated reaction zone (...)" and not heating of the reaction zone itself by the reactant mixture.

4. Regarding rejection of claims under 35 U.S.C. §102(b), the applicant argues that reactor disclosed by Hasche'452 is devoid of porous fixed bed. This is not found persuasive, as Fig. 1 of Hasche'452 clearly shows a fixed bed 2 and 3 containing pores 4.

Further the applicant argues that nowhere in the Hasche'452 there is disclosure or suggestion of performing any combustion, much less superadiabatic combustion, in a porous fixed bed. This is not found persuasive. Hasche'452 clearly discloses that reaction zone (comprising a fixed bed 2 and 3 containing pores 4) is preheated to a temperature sufficient for SAC (see C7/L16-22). Further Hasche'452 discloses that superadiabatic combustion (at flame temperatures of combustion reaction as disclosed previously) occurs in pores 4 of the fixed bed 2 and 3 (see C7/L56-C8/L7). The fact that said combustion continues in chamber 8 is irrelevant to the rejection of record, as open ended transitional term "comprising" in rejected claims permits inclusion of other steps, elements, or materials, including both, those disclosed but not claimed by applicant and those neither disclosed nor contemplated by applicant. See *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981).

5. Regarding rejection of claims under 35 U.S.C. §103(a), the applicant argues that deficiencies of Hasche'452 are not remedied by any of the additional patents. Said arguments are not persuasive for the reasons as set forth above.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Basia Ridley, whose telephone number is (571) 272-1453.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on (571) 272-1444.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Technical Center 1700 General Information Telephone No. is (571) 272-1700. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

BR

July 4, 2005